

The Softness of Things: Technology in Space and Form

Despina Papadopoulou, Fall 2007

Jasper Johns once wrote in his notebook: "Take an object. Do something to it. Do something else to it." In this class we investigate what it means to "do things" to objects in ways that transforms them and our relationship to them. We will experiment with materials and objects, stretching their limits and exploring their relationship to space and the body. These investigations are grounded in an understanding of the interactional possibilities of gestures, social and spatial dynamics, networks and open source systems while we develop a new set of artifacts and construction techniques. Softness, modularity, adaptability and re-configurability, washability, power management, connectors and ways to engage the senses (and sensors) are just some of the ideas and topics we examine through weekly assignments and social experiments.

Week 1: Introduction

Intro - what is this class about. What it means to "do something to a thing", how technology participates or affects the transformation of objects, perceptions and interactions? How can we as designers and practitioners experiment with objects and materials and create new emergencies?

Week 2: Modularity - Configurability - Adaptability

Modularity exists in all levels of the biological hierarchy. We will look into the history of modularity, from the disk of Phaistos to Lego blocks and Voodoo IO, and experiment with developing our own modules, which we will reuse throughout the semester. In the process we will examine camouflage, strategies of reinterpretation and reformulation, adaptation, reconfigurability, inheritance and conservation.

Week 3: Connectivity connectors and connections

"I made a connection", "I connected the dots", "She is so well connected!"
In the making of new things a great challenge is to find ways to connect them to "old" ones. When we create new connections we also create new possibilities while the lack of connections, physical or otherwise, has distinct effects. We will survey existing connectors and investigate what it entails to create new ones.

Week 4: Networks & Flow

With connections networks become possible while they often serve as substitutions for physical connections. We will look into mesh networks and their nodes, communities, marginalization and flow, and experiment with creating our own.

Week 5: Ecology, energy and sustainability

There is much talk for the need of sustainable design. We are in a unique position to explore "sustainability as interaction" - both figuratively and literally. We will look into Buckminster Fuller's World Game, the lessons of Cradle-to-Cradle and see what alternative energy sources we can harness for our own projects.

Week 6: The Oxford English Dictionary, Open Source and Free Software

It is clear that for sustainable solutions to come about we need to engage in “distributed problem solving”, in team based multidisciplinary practices, in others words, learning to share. We will survey the existing state of sharing and technology, from open source to DIY and explore how we can share work produced it this class.

Week 7: Body - “Man is the measure of all things” and human centric design

Designing tools and devices for humans. What is the methodology to follow? Design after our own image? And what about “emotional” design? We will look into the human body and mind, evaluate existing design objects and create our own variations.

Week 8: Space (architecture, form, dance)

Understanding the way we relate to space is fundamental in any investigation of interactive design. We will look into architecture, dance, social and spatial dynamics, relate them to our practice, and see what type of interventions we can come up with.

Week 9: New Materials

The “materials is the mechanism” – How do new materials affect our practice? What new materials can we use and how can we extend their prescribed use? From Eva Hesse’s work to Biomimicry we will probe into the nature of materials and their uses, and stretch their limits in our projects.

Week 10: Fort-Da; Principles of Interactivity

In Beyond the Pleasure Principle Freud describes a game his grandson had devised – throwing objects and declaring Fort! (gone) and then retrieving them, Da! (there). We will look into this play of absence and presence and use it as a spring board for a discussion of interactivity, performance and playfulness.

Week 11: Meaning / Narrative - Presence / Awareness

With technology the possible is ever expanding. We can measure, track, quantify, visualize, sense (and so on), a vast number of data – but to what end? What role does meaning and narrative play in this process? How can objects become part of narrative, what is the “middle” of narrative? And what about notions of presence and awareness in a techno-efficient environment?

Week 12: Transformations

Technology is largely about transformation. We will retrace the themes that we have been working on throughout the semester and see how they have transformed our work. We will retrace assignments, exercises and projects we developed during the semester and synthesize them. In the process we will transform them, reevaluate their various aspects, and improve them with final transformational interventions.

Week 13 & 14: Class Presentations